

WE CLAIM:

Claim 1. A display panel for amplifying light reflection intensity, the display panel comprising:

a substrate;

at least one protrusion on a face of the substrate; and

a light reflective layer deposited adjacent to the protrusion, wherein the protrusion amplifies light reflection intensity when light is reflect off the light reflective layer.

Claim 2. The device of claim 1, wherein the light reflective layer comprises programmable code information and the protrusion amplifies the light reflection intensity such that the programmable code information is optimally detected.

Claim 3. The device of claim 2, wherein the programmable code information comprises at least one position sensing code.

Claim 4. The device of claim 1, further comprising:

a light shielding layer, wherein the light reflective layer is disposed on a surface of the light shielding layer.

Claim 5. The device of claim 4, further comprising:
a plurality of color filters, wherein the plurality of color filters are disposed between the light shielding layer and between the light reflective layer.

Claim 6. The device of claim 1, wherein the protrusion is configured to optimally amplify light reflective intensity.

Claim 7. The device of claim 6, wherein the protrusion comprises at least one arcuate protrusion or at least one angular protrusion.

Claim 8. A method of manufacturing a light reflecting amplification structure, said method comprising the steps of:

forming at least one protrusion on one face of a substrate; and
depositing a light reflective layer on the protrusion, wherein the protrusion amplifies light reflection intensity when light is reflect off the light reflective layer.

Claim 9. The method of claim 8, wherein the step of forming the protrusion comprises the steps of:

depositing a transparent film on the one face of the substrate; and
etching the transparent film to form the protrusion on the transparent film.

Claim 10. The method of claim 8, wherein the step of forming the at least one protrusion comprises the step of:

etching the substrate to form the protrusion on the one face of the substrate.

Claim 11. The method of claim 8, wherein the step of forming the protrusion comprises the step of:

forming the protrusion having a configuration to optimally amplify light reflective intensity.

Claim 12. The method of claim 11, wherein the step of forming the protrusion comprises the step of:

forming the protrusion having an arcuate configuration or an angular configuration.

Claim 13. The method of claim 12, further comprising the steps of:

depositing a light shielding layer on one face of the light reflecting layer.